# MAS 7396: Algebraic Number Theory

Fall 2019

Instructor: Kevin Keating

Office: Little 482 Telephone: 294–2311

E-mail: keating@ufl.edu

Web Page: http://people.clas.ufl.edu/keating/7396-f19/

Class meets MWF 1:55–2:45 in Matherly 116

Office hours: Mondays and Wednesdays 1:00–1:45, Mondays 3:00–4:00,

or by appointment.

#### Textbook

Algebraic Number Theory by Fröhlich and Taylor.

# Syllabus

This course is an introduction to algebraic number theory. The basic objects of study are finite extensions of the rational numbers, and the rings of integers of these fields. Students enrolled in the course should have a solid background in abstract algebra, preferably from the 6000 algebra sequence.

## Homework

Homework problems will be assigned and collected. Although you are encouraged to discuss these problems with your classmates, all work you turn in for grading should be your own. In particular, no collaboration is allowed on final write-ups of solutions.

### **Presentations**

Each student will make a presentation to the class, based on a research article chosen in collaboration with the instructor.

# Grading

Grades will be based on the homework assignments and the class presentation.